

IN THE CLAIMS

Please amend the claims as follows:

1. (Cancelled).

2. (Currently Amended) ~~Method A method of monitoring the operational temperature of operating a disc drive having a semi-conductor laser device (3) in a disc drive (1), the method comprising the steps of:~~

5 ~~.....applying electrical power to said semi-conductor laser device (3);~~

.....~~measuring a light intensity (Levt) of a laser beam (4) generated by said semi-conductor laser device (20);~~

10 ~~.....controlling said electrical power such that said light intensity (Levt) remains constant;~~

.....~~measuring at least one electrical parameter (VCL; I) indicative of the work point (W) of said semi-conductor laser (20) device; and~~

15 ~~.....and determining said an operational temperature of said semi-conductor laser device on the basis of a predetermined relationship between said work point (W) on the one hand and said operational temperature on the other hand.~~

3. (Currently Amended) ~~Method The method of operating a disc drive which comprises a semi-conductor laser device (3) as claimed~~

in claim 2, wherein the method comprising further comprises the steps-step of:

5 applying electrical power to said semi-conductor laser device (3);
measuring a light intensity (I_{out}) of a laser beam (4) generated by
said semi-conductor laser device (20);
controlling said electrical power such that said light intensity
(I_{out}) remains constant;
10 measuring at least one electrical parameter (V_{CL} , I) indicative of
the work point (W) of said semi-conductor laser (20);
and taking temperature reducing steps if the measured
value of said at least one electrical parameter (V_{CL} , I) indicates
that the operational temperature of the laser device has reached a
15 predetermined critical temperature (T_{CRIT}).

4. (Currently Amended) Method according to The method as
claimed in claim 3,

wherein said step of measuring at least one electrical
parameter comprises measuring a plurality of electrical parameters
5 (V_{CL} , I) indicative of the work point (W) of said semi-conductor
laser (20) are measured; device;
and wherein said temperature reducing steps are taken if
at least one of said plurality of electrical parameters indicates
that the operational temperature of the laser device has reached a
10 predetermined critical temperature (T_{CRIT}).

5. (Currently Amended) ~~Method according to~~The method as
claimed in claim 3 or 4, wherein ~~an~~the at least one electrical
parameter ~~(VCL)~~ is compared with a predetermined parameter level
~~(VCRT, VNORM)~~.

6. (Currently Amended) ~~Method according to~~The method as
claimed in claim 5,
.....wherein said electrical parameter ~~(VCL)~~ is measured at a
certain known temperature of the laser device, this measured value
5 being taken as zero value ~~(V0)~~TL.

.....wherein said electrical parameter ~~(VCL)~~ is measured during
operation of the disc drive to yield an actual value ~~(VCL)~~TL.

.....and wherein the difference ~~(CV)~~ between the actual value
of said electrical parameter ~~(VCL)~~ and said zero value ~~(V0)~~ is
10 compared with a predetermined threshold.

7. (Currently Amended) ~~Method according to any of claims 3~~
~~6~~The method as claimed in any one of claims 3-6, wherein said
temperature reducing steps comprise, ~~for instance~~, the step of
operating a cooling device or a ventilator, or the step of reducing
5 a clock frequency, or the step of reducing a rotational speed of a
motor ~~(2)~~ of said disc drive ~~(1)~~.

8. (Currently Amended) ~~Method according to~~The method as
claimed in claim 7, wherein ~~a~~the rotational speed of ~~a~~the motor
~~(2)~~ of said disc drive ~~(1)~~ is reduced when said electrical

parameter ~~{VCL}~~ reaches a first predetermined parameter level
5 ~~{VCRIT}~~ indicative of said semi-conductor laser device ~~{20}~~ having
reached a predetermined critical temperature ~~{TCRIT}~~, and wherein
the rotational speed of said motor ~~{2}~~ of said disc drive ~~{1}~~ is
increased when said electrical parameter ~~{VCL}~~ reaches a second
predetermined parameter level ~~{VNORM}~~ indicative of said semi-
10 conductor laser device ~~{20}~~ having reached a normal temperature.

9. (Currently Amended) ~~Disc-A disc drive {1}, comprising:~~
.....a disc drive motor ~~{2}~~ for rotating an optical disc ~~{10}~~;
.....a laser device ~~{3}~~ for generating a laser beam ~~{4}~~ for
scanning the optical disc; and
5a control unit ~~{5}~~ for controlling the disc drive motor ~~{2}~~
and the laser device ~~{3}~~;
wherein the control unit ~~{5}~~ is designed to ~~monitor~~ monitors at
least one electrical parameter ~~{VCL, I}~~ indicative of the ~~a~~ work
point ~~{W}~~ of a semi-conductor laser ~~{20}~~ of said laser device ~~{3}~~,
10 and ~~to take~~ takes laser device temperature affecting steps in
~~dependency of dependence on~~ said at least one electrical parameter
~~{VCL, I}~~.

10. (Currently Amended) ~~Disc-The disc drive according to as~~
claimed in claim 9, wherein the control unit ~~{5}~~ is designed to
~~control~~ controls the rotational speed of said disc drive motor ~~{2}~~
in ~~dependency of dependence on~~ said at least one electrical
5 parameter ~~{VCL, I}~~.

11. (Currently Amended) ~~Disc-The disc drive according to~~
~~claimed in claim 9 or 10, wherein said disc drive further~~
~~comprisingcomprises:~~

5 ~~_____ a light intensity sensor (7) coupled to an input (8) of~~
~~the control unit (5), disposed to receivesaid light intensity~~
~~sensor receiving at least a portion of the laser beam (4) generated~~
~~by the semi-conductor laser (20), and designed to generatesaid~~
~~light intensity sensor generating a measuring signal (6)~~
~~representative of the light intensity of said laser beam (4);~~

10 ~~_____ the control unit (5) being designed to controlcontrolling~~
~~said semi-conductor laser (20)in response to said measuring signal~~
~~such as to maintain a constant laser beam intensity.~~

12. (Currently Amended) ~~Disc-The disc drive according to~~
~~claimed in claim 11, wherein said at least one electrical parameter~~
~~(VCL, I) comprises an output voltage (VCL) of the control unit (5).~~

13. (Currently Amended) ~~Disc-The disc drive according to~~
~~claimed in claim 11, wherein said at least one electrical parameter~~
~~comprises the a difference (V) between the an actual value of a~~
~~the output voltage (VCL) of the control unit (5) and a zero value~~
5 ~~(V0) of said output voltage (VCL) of the control unit (5) measured~~
~~at a certain known temperature of the laser device.~~

14. (Currently Amended) ~~Disc-The disc drive according to any of~~
~~claims 9-13 as claimed in claim 9, wherein said disc drive~~
~~comprises~~comprising a plurality of semi-conductor lasers ~~(20A,~~
20B);

5 ~~wherein the control unit (5) has a plurality of outputs~~
~~(6A, 6B) each providing a corresponding control signal (VCL, A,~~
VCL, B) to a corresponding one of said semi-conductor lasers ~~(20A,~~
20B);

10 ~~and wherein the control unit (5) is designed to~~
~~monitor~~monitors a single signal indicative of a work point of only
one of said semi-conductor lasers ~~(20A, 20B), and to take~~takes
laser device temperature affecting steps in dependency of ~~dependence~~
on said single threshold voltage indicating signal.

15. (Cancelled).